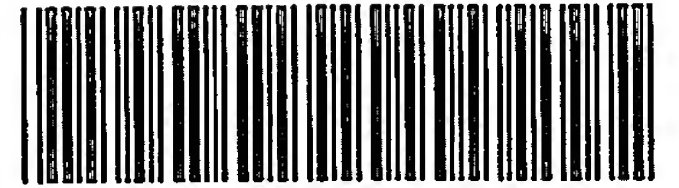


#2

059  
0315

OIPE

# 2.

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/085,519

DATE: 03/19/2002

TIME: 14:52:44

Input Set : N:\Crf3\RULE60\10085519.raw

Output Set: N:\CRF3\03192002\J085519.raw

1 <110> APPLICANT: Audoneet et al.  
2 <120> TITLE OF INVENTION: POLYNUCLEOTIDE VACCINE FORMULA, PARTICULARLY FOR  
3 TREATING BOVINE RESPIRATORY DISEASE  
4 <130> FILE REFERENCE: 454313-2250  
6 <140> CURRENT APPLICATION NUMBER: 10/085,519  
7 <141> CURRENT FILING DATE: 2002-02-28  
9 <150> PRIOR APPLICATION NUMBER: 09/232,279  
10 <151> PRIOR FILING DATE: 1999-01-15  
13 <160> NUMBER OF SEQ ID NOS: 19  
14 <170> SOFTWARE: PatentIn Ver. 2.1  
16 <210> SEQ ID NO: 1  
17 <211> LENGTH: 2799  
18 <212> TYPE: DNA  
19 <213> ORGANISM: Bovine herpesvirus 2  
20 <400> SEQUENCE: 1

21	atggccgctc	gcggcggtgc	tgaacgcgcc	gcgggcgcgc	gagacggtcg	gcgaggacag	60
22	cgtcgtcatc	tacgaccggg	acgtgttctc	gctgctctac	gcggtcctgc	agcgcctggc	120
23	gccggcgggg	cgcgcgcgcg	gctagccgct	gccctgctat	gggcgacgtg	ggccctgctg	180
24	ctggcgggcg	ccgcccgcgg	gcgaccggcg	acaacgcccc	cggcgccccc	gcccgaagag	240
25	gccgcgagcc	cggcgccccc	cgcgagcccc	agcccccccg	gccccgacgg	cgacgacgcc	300
26	gccagccccc	acaacagcac	ggacgtgcgc	gccgcgctcc	ggctcgcgca	ggcggccggg	360
27	gaaaactcgc	gcttcttcgt	gtgcccgccg	ccctcggggc	ccacggtggt	ccggctcgcg	420
28	cccgcgcggc	cgtgccccga	gtacgggctc	gggcggaact	acacggaggg	catcggcgtc	480
29	atttacaagg	agaacatcgc	gccgtacacg	ttcaaggcct	acatttataa	aaacgtgata	540
30	gtgaccacga	cctggggcgg	cagcacgtac	gcggccatta	caaaccagta	cacggaccgc	600
31	gtgcccggtg	gcatgggcga	gatcacggac	ctggtggaca	agaagtggcg	ctgcctttcg	660
32	aaagccgagt	acctgcgcag	cgggcgcgaag	gtggtggcct	ttgaccgcga	cgacgacccc	720
33	tgggagggcg	cgtgaagcc	cgcgcggctg	agcgcgcccc	gggtgcgggg	ctggcacacg	780
34	acggacgatg	tgtacacggc	gctgggctcg	gcggggctct	accgcacggg	cacctctgtg	840
35	aactgcatcg	tggagaaggt	ggaggcgcgc	tcggtgtacc	cgtacgactc	gttcgcgctc	900
36	tcgaccgggg	acattatcta	catgtcgccc	ttttacgggc	tgcgcgaggg	cgcgcacccg	960
37	gagcacacca	ggctactcgc	cggagcgctt	ccagcagatc	gagggctact	acaagcgcga	1020
38	catggccacg	ggccggcgcc	tcaaggagcc	ggtctcgcgg	aactttttgc	gtacacagca	1080
39	cgtgacggta	gcctgggact	gggtgcccaa	gcgcaaaaac	gtgtgctcgc	tggccaagtg	1140
40	gcgcgaggcg	gacgaaatgc	tgcgagacga	gagccgcggg	aacttccgct	tcacggcccc	1200
41	ctcgtctctg	gcgacctttg	tgagcgacag	ccacaccttc	gcgttgca	atgtgccgct	1260
42	gagcgactgc	gtgatcgaag	aggccgaggc	cgcggtcgag	cgcgtctacc	gcgagcgcca	1320
43	caacggcacg	cacgtgctgt	cgggcagcct	ggagacgtac	ctggcgcgcg	gcggctttgt	1380
44	cgtggccttc	cggcgatgct	cagcaacgag	ctggccaagc	tgtacctgca	ggagctggcg	1440
45	cgtcgaacg	gcacgctcga	ggggctgttc	gcgcgcgcgg	cgcccaagcc	gggcccgcgg	1500
46	cgcgcgcgcc	gcgcgcgcgc	gtccgcgcgc	ggcagcccg	gcgcggccaa	cgggcccgcg	1560
47	ggcgacggcg	acgccggcgg	gcgggtgact	accgtgagct	cggccgagtt	tgcggcgctg	1620
48	cagttcacct	acgaccacat	ccaggaccac	gtgaacacca	tgttcagccg	cctggccacg	1680

ENTERED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/085,519

DATE: 03/19/2002

TIME: 14:52:44

Input Set : N:\Crif3\RULE60\10085519.raw

Output Set: N:\CRF3\03192002\J085519.raw

```

49      tcctggtgcc tgctgcagaa caaggagcgc gccctgtggg ccgaggcggc taagctcaac 1740
50      cccagcgcgg cggccagcgc tgcgctggac cgccgcgccg ccgcgcgcac gttggggggac 1800
51      gccatggccg tgacgtactg ccacgagctg ggcgaggggc gcgtgttcat cgagaactcg 1860
52      atgcgcgcgc ccggcggcgt ttgctacagc cgcccgcggg tctcctttgc cttcggcaac 1920
53      gagagcgagc cggtgagggg ccagctcggc gaggacaacg agctgctgcc gggccgcgag 1980
54      ctcgtggagc cctgcaccgc caaccacaag cgctacttcc gctttggcgc ggactacgtg 2040
55      tactacgaga actacgcgta cgtgcggcgg gtcccgcctc cggagctgga ggtgatcagc 2100
56      acctttgtgg acctaaacct cacggttctg gaggaccgcg agttcttgcc gctagaagtg 2160
57      tacacgcgcg ccgagctcgc cgacacgggt ctgctcgact acagcgagat acagcgccgc 2220
58      aaccagctgc acgagctccg gttctacgac attgaccgcg tggccaagac ggacggcaat 2280
59      atggccatca tgcgagggct cgccaacttc tttcagggcc tgggcgccgt cgggcaggcg 2340
60      gtggggcacgg tggtgctggg cgccgcgggt gccgcgctct cgaccgtgtc gggcatcgcc 2400
61      tcgtttattg cgaacccggt cggcgcgctg gccacggggc tgctggtgct cgccgggctg 2460
62      gtggccgctt tcctggcgta ccggtacatt tcccgcctcc gcagcaaccc catgaaggcg 2520
63      ctgtaccgga tcaccacgcg cgcgctcaag gacgacgccc ggggcgcaac cgccccgggc 2580
64      gaggaagagg aggagtttga cgcggccaaa ctggagcagg cccgcgagat gatcaagtat 2640
65      atgtcgctcg tgtcagcggc cgagcggcaa gagcacaagg cgaaaaagag caacaagggc 2700
66      ggcccgcctg tggcgaccgc gctgacgcag ctcgcgcttc ggcggcgggc gccgccggag 2760
67      taccagcagc ttccgatggc cgacgtcggg ggggcatga 2799
69 <210> SEQ ID NO: 2
70 <211> LENGTH: 30
71 <212> TYPE: DNA
72 <213> ORGANISM: Bovine herpesvirus 2
73 <400> SEQUENCE: 2
74      ttgtcgacat ggccgctcgc ggcggtgctg 30
76 <210> SEQ ID NO: 3
77 <211> LENGTH: 21
78 <212> TYPE: DNA
79 <213> ORGANISM: Bovine herpesvirus 2
80 <400> SEQUENCE: 3
81      gcagggcagc ggctagcgcg g 21
83 <210> SEQ ID NO: 4
84 <211> LENGTH: 31
85 <212> TYPE: DNA
86 <213> ORGANISM: Bovine herpesvirus 2
87 <400> SEQUENCE: 4
88      aaactgcaga tgcaagggcc gacattggcc g 31
90 <210> SEQ ID NO: 5
91 <211> LENGTH: 27
92 <212> TYPE: DNA
93 <213> ORGANISM: Bovine herpesvirus 2
94 <400> SEQUENCE: 5
95      atcttgtacc atatgaccgt ggcgttg 27
97 <210> SEQ ID NO: 6
98 <211> LENGTH: 33
99 <212> TYPE: DNA
100 <213> ORGANISM: Bovine herpesvirus 2
101 <400> SEQUENCE: 6
102      aaaactgcag ggatggcggc aacagccatg agg 33

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/085,519

DATE: 03/19/2002

TIME: 14:52:44

Input Set : N:\Crf3\RULE60\10085519.raw

Output Set: N:\CRF3\03192002\J085519.raw

```

104 <210> SEQ ID NO: 7
105 <211> LENGTH: 31
106 <212> TYPE: DNA
107 <213> ORGANISM: Bovine herpesvirus 2
108 <400> SEQUENCE: 7
109      cgcggatcct catttactaa aggaaagatt g          31
111 <210> SEQ ID NO: 8
112 <211> LENGTH: 32
113 <212> TYPE: DNA
114 <213> ORGANISM: Bovine herpesvirus 2
115 <400> SEQUENCE: 8
116      aaaactgcag atgtccaacc atacccatca tc          32
118 <210> SEQ ID NO: 9
119 <211> LENGTH: 35
120 <212> TYPE: DNA
121 <213> ORGANISM: Bovine herpesvirus 2
122 <400> SEQUENCE: 9
123      cgcggatccc tagatctgtg tagttgattg atttg          35
125 <210> SEQ ID NO: 10
126 <211> LENGTH: 35
127 <212> TYPE: DNA
128 <213> ORGANISM: Bovine herpesvirus 2
129 <400> SEQUENCE: 10
130      aaaactgcag atgtccgaca caaaagcaga agggg          35
132 <210> SEQ ID NO: 11
133 <211> LENGTH: 47
134 <212> TYPE: DNA
135 <213> ORGANISM: Bovine herpesvirus 2
136 <400> SEQUENCE: 11
137      cgcggatcct caataaaaat cattcccact gcgacttgaa acaaaac          47
139 <210> SEQ ID NO: 12
140 <211> LENGTH: 32
141 <212> TYPE: DNA
142 <213> ORGANISM: Bovine herpesvirus 2
143 <400> SEQUENCE: 12
144      acgcgtcgac atgaagaaac tagagaaagc cc          32
146 <210> SEQ ID NO: 13
147 <211> LENGTH: 33
148 <212> TYPE: DNA
149 <213> ORGANISM: Bovine herpesvirus 2
150 <400> SEQUENCE: 13
151      cgcggatcct cagccggggt tgcaaactgg gag          33
153 <210> SEQ ID NO: 14
154 <211> LENGTH: 36
155 <212> TYPE: DNA
156 <213> ORGANISM: Bovine herpesvirus 2
157 <400> SEQUENCE: 14
158      acgcgtcgac atgacgacta ctgcattcct ggtatg          36
160 <210> SEQ ID NO: 15

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/085,519

DATE: 03/19/2002  
 TIME: 14:52:44

Input Set : N:\Crf3\RULE60\10085519.raw  
 Output Set: N:\CRF3\03192002\J085519.raw

```

161 <211> LENGTH: 33
162 <212> TYPE: DNA
163 <213> ORGANISM: Bovine herpesvirus 2
164 <400> SEQUENCE: 15
165      cgcggatcct cattgacgtc ccgaggtcat ttg      33
167 <210> SEQ ID NO: 16
168 <211> LENGTH: 33
169 <212> TYPE: DNA
170 <213> ORGANISM: Bovine herpesvirus 2
171 <400> SEQUENCE: 16
172      tttgtcgaca tggaatattg gaaacacaca aac      33
174 <210> SEQ ID NO: 17
175 <211> LENGTH: 33
176 <212> TYPE: DNA
177 <213> ORGANISM: Bovine herpesvirus 2
178 <400> SEQUENCE: 17
179      tttggatcct tagctgcagt ttttcggaac ttc      33
181 <210> SEQ ID NO: 18
182 <211> LENGTH: 30
183 <212> TYPE: DNA
184 <213> ORGANISM: Bovine herpesvirus 2
185 <400> SEQUENCE: 18
186      tttgtcgaca tgatcatcac aaacacaatc      30
188 <210> SEQ ID NO: 19
189 <211> LENGTH: 30
190 <212> TYPE: DNA
191 <213> ORGANISM: Bovine herpesvirus 2
192 <400> SEQUENCE: 19
193      tttggatcct cattgtctac ttgttagtac      30

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/085,519

DATE: 03/19/2002

TIME: 14:52:45

Input Set : N:\Crf3\RULE60\10085519.raw

Output Set: N:\CRF3\03192002\J085519.raw